

ABSTRACT OF THE DISCLOSURE

A system for separating light into different spectrums and for recombining the light includes at least one polarizing beamsplitter and at least one retarder stack configured to condition the polarization of input light differently for different spectrums. A device embodying the invention could utilize multiple polarizing beamsplitters and multiple retarder stacks. Alternatively, a system could utilize a single polarizing beamsplitter and a single retarder stack in combination with one or more dichroic beamsplitters. In preferred embodiments, one or more reflective modulator panels are included to separately modulate each separated spectrum of light. Such an embodiment can be used for a color projection system. In each of the embodiments that utilize modulators, distances between the modulators and the focusing optics is essentially the same.

0 9 7 3 0
1 0 8 5 0
4 3 6 5 0
1 0 8 5 0
4 3 6 5 0